

Attorney Docket No.: UMD0067US.NP
Inventors: Welsh et al.
Serial No.: 10/565,417
Filing Date: August 3, 2006
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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of imputing missing values in microarray data comprising the steps of:

- (a) clustering the data by a Gaussian mixture clustering (GMC) model; and
- (b) estimating missing values by a GMCimpute algorithm thereby imputing so that missing values in microarray data are imputed; and
- (c) outputting the missing values to a display or memory.

Claim 2 (currently amended): The method of claim 1, wherein the Gaussian mixture clustering (GMC) model comprises the steps of

- (a) determining a value of K (number of clusters) for microarray data comprising rows and columns;
- (b) partitioning the rows of the microarray data into K partitions; and
- (c) repeating a Classification Expectation-Maximization algorithm until the K partitions converge.

Claim 3 (currently amended): A computer-readable medium encoded with a computer program ~~product comprising a computer software program~~, wherein the computer software program, once executed by a computer processor, performs a method of imputing

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missing values in microarray data according to the method of claim 1.

Claim 4 (currently amended): The computer program ~~product~~ of claim 3, wherein the Gaussian mixture clustering (GMC) model comprises the steps of

(a) determining a value of K (number of clusters) for microarray data comprising rows and columns;

(b) partitioning the rows of the microarray data into K partitions; and

(c) repeating a Classification Expectation-Maximization algorithm until the K partitions converge.

Claims 5-8 (canceled).